

REMARKS

The amendment to claim 1 incorporates the limitations of claim 2. The amendment to claims 13 and 19 incorporate features described in original claim 1 as well as in Figures 1, 2, 6, 7 and 10 and the discussion thereof in the specification. New claims 25 and 26 are supported by original Figures 1, 7 and 10. The amendments to the specification address informalities pointed out in the Office Action. Applicants submit that the amendment does not add any new matter.

Applicants submit that the amendments to the specification and the claims address the informalities pointed out in the Office Action. The term "input/output" has been inserted into the specification at the first occurrence of "I/O" and in the claims. Applicants submit that "input/output" is the standard terminology corresponding to "I/O". With respect to the [c1] numbering in the claims, applicants submit that such numbering is an artifact of the electronic filing system in place at the time the application was filed. Applicants note that the published version of the application (US 2005/0013124 A1) does show the standard claim numbering. On this basis, applicants submit that the specification and claims are now in proper form.

The invention centers on a low inductance connector design and packages and assemblies using the connector. The connector is characterized by the presence of at least two flexible parallel portions connecting a contact at each end of the connector where the contact surfaces are points for connection with a substrate and integrated circuit package. The two flexible portions can both be flexed in the same direction at the same time, and in an area array, the various connectors can be oriented in a manner to reduce stress in the overall interconnection of package to substrate (e.g., pc board). The connectors of the

invention advantageously enable area array connections without the use of solder columns and with reduced inductance compared to prior art designs.

Distefano et al. (US 6007349) discloses a connector with four flexible members (10) oriented in a circle or cylinder about a contact pad (27). As shown in Figures 11 and 15, the flexible members are flexed in opposite directions to accommodate a solder ball. Distefano et al. does not disclose a connector where the flexible members can be flexed in the same direction at the same time, nor the use of such in a package or assembly.

Guerin et al. (US 6532654) discloses a connector with parallel flexible members at one end where the end of each member forms a separate contact surface. Guerin et al. does not disclose or suggest a connector where the flexible members connect to common contact surfaces on both ends. Applicants submit that while the design of Guerin et al. is capable of having some inductance reduction compared to a single member connector, the design of Guerin et al. cannot achieve the amount of inductance reduction as with the design of the present invention given that the members of the Guerin et al. connector would become unreliable if their independent lengths were increased significantly. In contrast, the present invention is able to accommodate a parallel member feature for a predominant amount of its length, thereby leading to reliable connection and a significant reduction in inductance.

Applicants submit that the combination of Distefano et al. with Guerin et al. would not result in the connector, package or assembly presently claimed. Specifically, it is not apparent that the connector design of Distefano et al. can be used in compliance with Guerin et al.'s objective of having a sheet of connectors which can be created and subsequently decoupled from the sheet. Further, the substitution of the Distefano et al. style connector into Guerin et al. would still

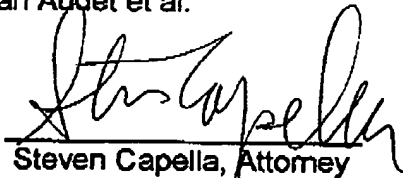
result in a connector where the members would not be flexible in the same direction at the same time as required by the present claims.

For the above reasons, applicants submit that the claims of the present application are now in condition for allowance. Such allowance is earnestly and respectfully solicited.

Respectfully submitted,

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By



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